PAEDIATRIC SEPSIS PATHWAY SWSLHD v1

SEPSIS KILLS
RECOGNISE • RESUSCITATE • REFER

CLINICAL EXCELLENCE COMMISSION

Use local febrile neutropenia guideline if the patient has haematology/oncology diagnosis

RECOGNISE

Does your patient have risk factors, signs or symptoms of infection?

- ❑ **Signs of toxicity** alertness, arousal or activity decreased; colour pale or mottled; cool peripheries; cry weak; grunting; rigors
- ❑ **Non-blanching rash**
- ❑ **Clinician concern of sepsis**
- ❑ **High level parental concern**
- ❑ **3 months of age or younger** (corrected)
- ❑ **Re-presentation within 48 hours**
- ❑ **Recent surgery**
- ❑ **Indwelling medical device**
- ❑ **Immunocompromised** e.g. asplenia, malignancy, chronic steroid use

AND

Does your patient have 1 Red Zone BTF or 2 Yellow Zone BTF criteria?
Note: only 1 BTF criterion required if the patient is immunocompromised

Respiratory Rate	☐ Red Zone	☐ Yellow Zone
Respiratory Distress	☐ Red Zone	☐ Yellow Zone
Heart Rate	☐ Red Zone	☐ Yellow Zone
Central Capillary Refill	☐ ≥ 5 sec	☐ 3-4 sec
Level of Consciousness	☐ AVPU : **P**ain or **U**nresponsive ☐GCS: Red Zone or ≥ 2 point drop	☐ AVPU: **V**oice
Temperature	☐ Red Zone OR ≥ 38°C if less than 4 weeks of age	☐ Yellow Zone

YES → <u>**Senior Clinician Review**</u>

Initiate appropriate treatment

- Full set of observations (Including Blood Pressure)
- Urgent blood gas
- Obtain IV access
- Blood culture, lactate, BGL, FBC & EUC

NO → Initiate appropriate treatment

- Increase frequency of observations
- Manage and reassess the patient
- Sepsis may still be of concern
- Refer to Recognition of the Sick Baby or Child and/or Fever CPGs

Does your patient have any of the following additional criteria?

- ❑ **Systolic Blood Pressure in the Red or Yellow Zone**
- ❑ **Base Excess ≤ -5**
- ❑ **Lactate ≥ 4 or procalcitonin (if available) ≥ 0.5**
- ❑ **Ongoing clinician concern**

RESPOND & ESCALATE

YES

THE PATIENT HAS SEVERE SEPSIS or SEPTIC SHOCK
until proven otherwise

Escalate immediately as per local CERS

- **Expedite transfer to resuscitation area or equivalent**
- **Immediate IV/IO access, fluid resuscitation and antibiotics**

TURN OVER PAGE FOR RESUSCITATION GUIDELINE

NO

The Patient may have SEPSIS

Escalate to Senior Clinician and/or Paediatrician within 30 minutes

- Monitor vital signs and fluid balance
- IV access and IV fluids
- Lactate > 2: Escalate to Senior Medical Clinician
- Investigate source of infection e.g. cultures/urine MC&S/swabs/CXR
- Administer empirical antibiotics within 1hr unless other diagnosis more likely

Do not delay administering antibiotics if septic screen is unsuccessful

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GET HELP as per local CERS

CLINICAL EXCELLENCE COMMISSION

RESUSCITATE & RE-ASSESS

Chart all observations on the age appropriate ED-SPOC

A — **Maintain patent airway**

B — **Give oxygen** | **Monitor: Resp rate SpO$_2$ Resp distress**
Maintain SpO$_2$ $\geq$ 95%

C — **Intravenous access collect and check:**
- ❑ FBC
- ❑ UEC
- ❑ LFTs
- ❑ Coags
- ❑ PCT
- ❑ VBG
- ❑ Blood culture(s)
- ❑ BGL
- ❑ Lactate
- ❑ BE

Consider intraosseous access after two failed IVC attempts or 60 seconds

Fluid resuscitation | **Monitor: HR Capillary refill BP Colour**
Give 0.9% NaCl 20mL/kg bolus STAT
Repeat 20mL/kg bolus if no improvement in heart rate, capillary refill, colour or perfusion

START EMPIRICAL ANTIBIOTICS WITHIN 60 MINUTES
Neonatal or Paediatric First Dose Empirical IV Antibiotic Guideline

D — **Assess level of consciousness** | **Monitor: LOC**

E — **Examine patient for source of sepsis** | **Monitor: Temperature**
Collect appropriate swabs, urine MCS, NPA, CXR

F — **Fluid balance chart** | **Monitor: Urine output**
Consider indwelling catheter
Maintain urine output $\geq$1mL/kg/hr

G — **Treat Hyper/Hypoglycaemia**
Hypoglycaemia: 2mL/kg of 10% Dextrose (refer to CPGs)

RE-ASSESS

Continuous monitoring → Repeat Observations at least every 15 minutes

Between the Flags

Signs of improving Clinical condition may include:
- Improved LOC
- Decreasing lactate
- Improved capillary refill & BP
- Improved heart rate
- Improved colour
- Urine output $\geq$1mL/kg/hr

REFER

IF NO IMPROVEMENT → ADDITIONAL MANAGEMENT IS REQUIRED

This child may need transfer to a Paediatric Intensive Care Unit

Seek advice immediately from NETS (1300 36 2500)
in collaboration with local/regional paediatric experts
or consult paediatric intensivist within your hospital if available

Consider and/or prepare for:
1. Other diagnoses or contributing factors
2. Further IV/IO 20mL/kg fluid boluses of 0.9% NaCl or colloid
3. Intubation
4. Inotropes to achieve SBP above the 'lower' Red Zone threshold
5. Corticosteriods (discuss with NETS/paediatric intensivist)
6. Correct hypocalcaemia if present